DESCRIPTIONS OF TWO NEW SPECIES OF *CARENUM* FROM WEST AUSTRALIA, WITH NOTES ON THE SYNONYMY AND DISTRIBUTION OF SOME PRE-VIOUSLY DESCRIBED SPECIES.

BY THOMAS G. SLOANE.

In the following paper I describe two new species of *Carenum* from West Australia, which I have received from Mr. C. French of Melbourne as coming from between York and Yilgarn Goldfield. I also take the present opportunity to publish some information I have collected with regard to the synonymy and distribution of a few previously described species. I had hoped to have treated of the synonymy of the whole group of *Carenides* before long, but pressure of business and absence from Sydney have compelled me to relinquish the idea; and I now offer these notes merely as a contribution towards the elucidation of the synonymy of the group, which can only be undertaken in Sydney by a careful study of the Macleay Collection.

CARENUM IGNOTUS, n.sp.

Form elongate. Black, shining, (upper surface of head and prothorax dull in my specimen), elytra with a very narrow and faint edge of cærulean hue. Head subquadrate $(4 \times 4\frac{1}{2} \text{ mm.})$, depressed; frontal sulei short, curved, not connected behind, almost parallel backwards, and extending forwards in full depth towards base of mandibles; preocular process prominent; eyes not prominent; two supra-orbital punctures on each side; antennæ moniliform, not tapering, last joint short and obtuse. Prothorax broader than long $(5 \times 6\frac{1}{4} \text{ mm.})$, smooth, subconvex, declivous behind; anterior angles rounded, not advanced; sides parallel in front of the

428 DESCRIPTIONS OF TWO NEW SPECIES OF CARENUM,

posterior angles, rounded at the posterior angles, obliquely narrowed behind them, and lightly sinuate before the base; base widely sublobate, truncate; marginal border narrow, not more prominent at posterior angles, thicker and more reflexed on the base; median line finely and distinctly marked; three marginal punctures on each side. Elytra oval $(11 \times 6\frac{3}{4} \text{ mm.})$, lævigate, subconvex; the disc depressed towards the base, slightly emarginate between the shoulders; sides lightly and evenly rounded; marginal border narrow; a row of equally placed punctures along the margin, and four punctures in a cluster on the base of each elytron near the humeral angle; two discoidal punctures on each elytron, one near the humeral angle, the other towards the apex. Prosternum smooth and strongly excavate between the coxæ. Anterior tibiæ bidentate; legs as in *C. scaritioides* and allied species.

Length 21, breadth $6\frac{3}{4}$ mm.

Hab.-W.A. (between York and Yilgarn).

This species belongs to the same group as C. scaritioides, Westw., but it is a much flatter insect and differs in the shape of the prothorax, which is less shortly rounded behind the posterior angles and has the base truncate, sublobate, and more strongly margined than the sides. It seems nearly allied to C. inconspicuum, Blackb., which, however, from the description, has the prothorax with the anterior angles advanced, and the hinder part differently shaped from C. ignotus.

CARENUM HABILIS, n.sp.

Form short, broad. Shining, head black (a greenish tinge on sides of throat); prothorax deep purple-black with broad metallic green margin, undersurface greenish towards the sides; elytra purple-black (the purple tinge more conspicuous towards the sides) margined with green, inflexed margins green; abdomen and legs black. Head subquadrate, transverse $(3\frac{1}{4} \times 5\frac{1}{4} \text{ mm.})$, smooth; frontal sulci curved, not connected behind, deep and almost parallel backwards, extending lightly forwards towards base of

mandibles; eyes not prominent; one supra-orbital puncture on each side; antennæ light, tapering. Prothorax short, transverse $(4 \times 7\frac{1}{4} \text{ mm.})$, smooth, subconvex; anterior angles broadly advanced; sides subparallel, a little rounded towards front, shortly rounded at posterior angles; base shortly lobate; marginal border broad on sides, reflexed, very strongly reflexed at posterior angles, thicker and less reflexed on basal lobe; median line lightly marked; two marginal punctures on each side. Elytra ovate $(10 \times 7 \text{ mm.})$, lævigate, convex; the suture deeply impressed; sides lightly and evenly rounded ; base truncate ; marginal border broad, reflexed; the marginal row of umbilical punctures evenly placed and strongly marked; each elytron with three punctures in a single row on base, and a discoidal puncture on apical third. Anterior tibiæ tridentate; inferior ridge strong; apical plate with a tooth projecting below the tarsi.

Length 20, breadth $7\frac{1}{4}$ mm.

Hab.-W.A. (between York and Yilgarn).

Of the species known to me this most resembles *C. dispar*, Macl.; but it differs conspicuously from that species in having the prothorax broader and less convex, and more strongly lobate, the elytra much less convex—especially towards the base—with the suture much more deeply impressed; the marginial border of both prothorax and elytra is broader.

The following notes contain information as to the synonymy and distribution of some species of the *Carenides* which I have accumulated during several years. I feel thoroughly satisfied of the correctness of all the synonyms given, but in any case where there may seem the least possibility of doubt I have stated such to be the case. To make the list of localities as useful as possible, while preserving conciseness and accuracy, I have added a key to their positions on the map. In all localities given without any authority being quoted I have myself collected specimens of the species referred to in such localities, and I have stated my authority in every case except where I am personally responsible for the locality.

430 DESCRIPTIONS OF TWO NEW SPECIES OF CARENUM,

Philoscaphus tuberculatus, Macl.

N.S.W.—Deniliquin, Mulwala, Narrandera, Condobolin, Coonabarabran, Nebea, Narrabri, Gragin : Q.—Finche's Creek.

Laccopterum loculosum, Newm. = L. variolosum, Macl.

A widespread species; very variable in size and appearance. I do not think L. variolosum can be maintained as a separate species.

N.S.W.—Murrumbidgee (Macleay), Forest Reefs (Lea), Mulwala : Victoria—Melbourne (Masters).

Carenum (Calliscapterus) campestre, Macl.

N.S.W.—Murrumbidgee (Macleay), Wilcannia District (Ellis), Liverpool Plains District (Peel), Mulwala, Nebea.

C. (Calliscapterus) odewahni, Casteln. = C. ordinatum, Macl.

S.A. (Castelnau, Macleay, &c.).

C. distinctum, Macl.

N.S. W.-Murrumbidgee (Macleay), Condobolin.

Carenum Bonellii, Brullé, = C. viridipenne, Westw. = \overline{C} . westwoodi, Casteln. = C. scitulum, Macl.

I believe de Castelnau was right in regarding *C. viridipenne* as a synonym of *C. Bonellii*, and I consider his *C. westwoodi* in the same light. As regards *C. scitulum*, from examination of a type specimen in the Australian Museum I am convinced it is founded on what may be regarded as a mere "sport" of *C. Bonellii*,—specimens being occasionally found without the anterior discoidal punctures of the elytra. Of two specimens found by me at Springwood, Blue Mountains, one had the four punctures as usual, the other had the posterior punctures marked as decidedly as usual, but no trace of either of the anterior punctures, yet there could be no doubt both were the same species—*C. Bonellii*.

Victoria.—Lakes Entrance (Du Boulay); N.S.W.—Sydney (Lea), Mt. Kosciusko (Castelnau), Goulburn, Appin, Springwood.

BY THOMAS G. SLOANE.

C. brisbanense, Casteln. = C. submetallicum, Macl.

There is a specimen labelled C. brisbanense in the Australian Museum, and it is identical with C. submetallicum.

Q.-Brisbane (Howitt), Gayndah (Masters).

C. castelnaui, Chaud. = C. occultum, Macl.

A comparison of the type of C. *occultum* in the Australian Museum with de Chaudoir's description of C. *castelnaui* leaves no doubt in my mind they are the same species.

Q.—Gayndah (Masters), Wallangarra (Kershaw).

Carenum sexpunctatum, Macl.

I now regard this species (after examination of the type) as identical with C. arenarium, Sl. It is, however, founded on a mere "sport," and the name *sexpunctatum* is quite misleading, as the species has normally only four punctures on the elytra.

N.S.W.-Murrumbidgee (Macleay), Mulwala.

C. murrumbigense, Macl.

N.S.W.—Mt. Kosciusko (Helms), Mulwala, Narhadhan, Condobolin.

C. kingi, Macl.

N.S.W.-Goonoo Goonoo (King), Bathurst (Lea).

C. decorum, Sl.

N.S.W.—Tamworth (Musson), Coonabarabran, Nebea: Q.— Finche's Creek.

C. subcostatum, Macl.

N.S.W.—Clarence River (Macleay): Q.—Wallangarra (Kershaw).

Eutoma newmani, Casteln. = E. punctulatum, Macl.

These are evidently the same species.

Q.-Port Denison (Castelnau), Coomooboolaroo (Barnard).

432 DESCRIPTIONS OF TWO NEW SPECIES OF CARENUM.

Carenidium kreusleræ, Macl. = C. lacustre, Macl.

After comparison of the type specimens of these species in Sir William Macleay's collection with several specimens in my collection from Mulwala, I regard them as identical.

S.A.--(Kreusler): N.S.W.--Wagga Wagga (Macleay), Mulwala.

Key to position of localities quoted.

New South Wales (N.S.W.); Appin (township), about 50 miles S. from Sydney; Condobolin (town), Lachlan River, about 147 E. long.; Coonabarabran (town), Castlereagh River, about 149 E. long.; Coonamble (town), Castlereagh River, about 148 E. long.; Deniliquin (town), Edwards River, 145 E. long.; Forest Reefs, western railway, a little E. from Orange; Gragin (station), 30 miles N.W. from Inverell, about 151 E. long.; Goonoo Goonoo (station), Peel River, near Tamworth, 151 E. long.; Mulwala (township), Murray River, 146 E. long.; Narrandera (town), Malf way between Murrumbidgee and Lachlan Rivers, 146 E. long.; Nebea (station), 18 miles N.E. from Coonamble; Springwood (town), western railway, 50 miles from Sydney; Wingelo (railway station), between Sydney and Goulburn.

Queensland (Q); Coomooboolaroo (station), west from Rockhampton, about 149 E. long.; Finche's Creek, a headwater of the Mooni River, about 40 miles S.W. from Dalby, Darling Downs District.

Victoria (V.). South Australia (S.A.).